#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015075 Address: 333 Burma Road **Date Inspected:** 20-Jun-2010

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang and Wu Zhi Cheng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Trial Assembly

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Incident Report for Segment 8AW to 8BW and 8BW to 8CW

This Quality Assurance (QA) Inspector wrote an Incident Report for Out of Flatness for Horizontal I-Stiffener welded at Corner Assembly at Transverse Splice at Cross Beam and Counter Weight Side for Segment 8AW to 8BW and 8BW to 8CW between Panel Point (PP) 64 to PP 64.5 and PP 67 to 67.5 for more comprehensive details please refer the Incident Report 04-0120F4\_TL-15\_B278\_06-20-10\_8BW&8CW\_Flatness\_Corner Assembly\_CB & CW Side Panel Point\_PP 67 to PP67.5 Dated June 20, 2010. Please refer the attached pictures for more comprehensive details.

Lift 7 (East)

This Quality Assurance (QA) Inspector measured and recorded the dimension and smoothness for the Cope Holes at Corner Assembly at following location after rectification.

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Segment 7AE

Cope Hole T1 at Panel Point (PP) 48 Cross Beam Side.

Segment 7CE

Cope Hole T1 at Panel Point (PP) 55 Cross Beam Side.

Segment 7DE

Cope Hole T2 at Panel Point (PP) 58.5 Cross Beam Side.

Segment 8CW

This QA inspector observed ZPMC qualified welding personnel performing Shield Metal Arc Welding (SMAW) VT repair welding was performed various locations on the field splice edge and temporary attachment areas counter weight side of segment. Welder is number identified as 068097. ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-Repair-1 and CWR1414 procedure.

Segment 8CW

This QA inspector observed ZPMC qualified welding personnel performing Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 046 located at SEG047B counter weight side segment. Welder number is identified 045246. ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and WR1631 procedure.

Segment 8CW

This QA inspector observed ZPMC qualified welding personnel performing Shield Metal Arc Welding (SMAW) VT repair welding was performed various locations on the T Stiffener and I rib hold back welds. Welder number is identified as 037723. ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

Segment 8CE

This QA inspector observed ZPMC qualified welding personnel performing Shield Metal Arc Welding (SMAW) welding was performed on weld joint 169 located at SSD18-PP070 cross beam side segment. Welder number is identified as 067571. ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

Segment 8CE

This QA inspector observed ZPMC qualified welding personnel performing Shield Metal Arc Welding (SMAW)

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

repair welding was performed on weld joint 046 located at SEG048B cross beam side segment. Welder number is identified as 067571. ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR 1618 (R3) procedure.

#### Segment 8CW

This QA inspector observed ZPMC qualified welding personnel performing Shield Metal Arc Welding (SMAW) welding was performed on weld joint 169 located at SSD22-PP070 cross beam side segment. Welder number is identified as 067665. ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





# **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer